



# Addressing Nitrate in California's Drinking Water

## A Community Perspective

Presented by:

Clean Water Action  
AGUA

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Community Water Center



# Nitrates and Groundwater

– no surprise

## **“Nitrate and California Agriculture”**

Nitrate Working Group

California Department of Food and Agriculture

February 1989



# Recommendations in 1989

- 1) Identify nitrate sensitive areas throughout the state.
- 2) Establish a list of priority areas in which nitrate control programs should be implemented.
- 3) In cooperation with local government and agriculture, establish nitrate management programs in priority areas.
- 4) Develop best management practices to be incorporated into local nitrate management programs.
- 5) Establish a research and demonstration project





# SBX2 1 Report – important findings

- Agriculture is far and away the leading source of contamination;
- Legacy contamination exists, it's serious, and...
- Nitrate contamination continues to occur with current agricultural practices



# Impacts to public health and the economy


- 254,000 residents in these areas are susceptible to contamination; 1.3 million are economically impacted
- Addressing current nitrate contamination will cost communities and funding sources an estimated \$20-\$36 million/year, and...
- That's just today. If current rates of contamination continue, so will the number of residents economically or physically impacted...as much as **80%** of local population by 2050.



# Recommendations in 2012

- Provide assistance to small water systems
- Promote nitrogen source reduction actions
- Monitor at-risk areas and populations
- Identify funding to assist systems without safe drinking water and provide education on best practices to farmers





**For decades, the state has known that current agricultural practices contaminate our drinking water, but has done little to fix it.**

- Department of Food and Agriculture
- Department of Public Health
- State and Regional Water Boards
- Department of Pesticide Regulation
- Department of Water Resources



# **This is a preventable problem, but we must act now.**

- Return the FREP program to its original intent
- Eliminate barriers to funding safe drinking water projects at the California Department of Public Health
- Implement an effective and enforceable Irrigated Lands Regulatory Program at the Regional Board Level
- Expand testing and funding programs to include state small water systems and domestic wells.



# What is it like to live with Nitrate?





**Throughout California, nitrate  
contamination is costing families, local  
governments and the state tens of millions  
of dollars a year.**



# San Jerardo's experience with contaminated groundwater

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# San Jerardo Co-operative Salinas, CA



- In the heart of the agricultural Salinas Valley
- Cooperative formed in 1979 as housing for Mexican farm-workers
- Currently there are more than 250 people living here

## Spotlight on San Jerardo



- For years, community members relied on drinking water with unsafe levels of Nitrates (more than 90 ppm) and 1,2,3 Trichloropropane
- This led to serious health problems among the residents
- Also wastewater problems



# San Jerardo's struggle



The County and the State and Regional Water Quality Control Board realized the serious problems that San Jerardo was facing – we thank you for taking action.



# The HIGH COSTS of agricultural contamination



- Monterey County paid \$18,000 every month for an interim filtration system for San Jerardo!
- A New Well was dug - at a cost of \$5.0 million!
- And now San Jerardo's water must be pumped uphill from 2 miles away and our rates are \$113 per month ! Can YOU imagine paying such high water rates?
- THIS IS THE HIGH PRICE OF AGRICULTURAL CONTAMINATION IN THE SALINAS VALLEY !



# **We support the Central Coast Ag Waivers**



- **Agricultural discharges must be regulated to protect our water quality.**
- **We strongly support the program adopted by the Central Coast in March.**
- **We want the Regional Board to put fines for non-compliance – the cost to peoples health is too high.**





***Safe and  
Affordable  
Drinking Water is  
an Environmental  
Justice Issue in  
the Salinas Valley***



QUEREMOS AGUA LIMPIA –  
We want clean water




A decorative graphic at the top of the slide consisting of several overlapping, wavy bands in various shades of blue, creating a sense of movement and depth.

# **We must provide assistance to impacted communities.**

- Existing funding programs are not sufficient to provide safe drinking water.
- Local communities are increasingly finding themselves unable to afford the increased costs of treatment necessary to have safe water.
- New funding sources must be developed and existing sources better targeted to ensure that communities have safe and affordable drinking water now.





*“The costs to provide safe drinking water to affected communities in this region are high, due to the large number of groundwater-contaminating nitrate sources, the dispersed population, and the high incidence of elevated nitrate levels in drinking water.”*

*--Addressing Nitrate in California’s Drinking Water*





**Many of these community public water systems are small water systems, which often already face chronic financial problems.**

- Small systems have difficulty in applying for and meeting the eligibility requirements to receive existing State funds for drinking water .
- Smaller systems lack economies of scale and often have less technical not have the resources to form a public entity, so they are ineligible for many State funding sources (State Revolving Fund, State bonds, etc.).



# State programs must be revised to meet the needs of small water systems.

- When funding is provided, these systems often lack the capacity to manage operation and maintenance costs or make loan repayments.
- Revising existing funding programs to encourage and guide good long-term local decisions.
- providing assistance to small systems in the application and management process.
- Combining successful funding programs may increase the funds available to small systems and increase the effectiveness of these funds in providing safe drinking water.



“Despite the existence of funding programs for safe drinking water, additional funding sources are needed.”

*--Addressing Nitrate in California's Drinking Water*








# **We must act now.**

**Since the early 1950s,  
the Department of Water Resources (DWR)  
has been gathering nitrate data.**

**The time has come to focus on SOLUTIONS.**






# **We cannot solve our nitrate problems without major changes in agricultural practices.**

- Currently, nitrogen efficiency rates average 30-40%.
- To reduce nitrate contamination on a widespread basis, we need to achieve efficiency rates of 60-80%.

**This is not “just” a legacy issue – it is about what we are doing today.**

**Voluntary practices alone are not  
sufficient to protect drinking water.**

A black and white photograph of a person holding a glass of water. The person is wearing glasses and a dark jacket. The background is a wooden fence. The image is overlaid with a blue and white graphic at the top and bottom.

**State & Regional Water Boards must make tough policy decisions. We  
need to implement solutions in regulatory programs.**



**Further study is important.**

Got Nitrates?

E-OROSI  
Water.

**But must be  
combined with ACTION.**

AGUA  
de  
DUCOR



# Essential Data Tools

- Groundwater Quality -- GAMA, Geotracker
- CDPH + Water System Boundary Maps
- Site-specific studies + well logs
- New data needed:
  - Fertilizer application
  - Management practices, nutrient budgets
  - Private well testing
  - Septic system data





**Nitrate contamination problems will grow. Costs will continue to increase.**

**Existing funding programs are not sufficient to provide safe water.**

**We ALL need to pay our fair share.**

# Support legislation to achieve safe drinking water for all:

- AB 685 (Eng): Establishing a State Policy to Implement the Human Right to Water in California
- AB 1669 (Perea): Establishing a mechanism to direct funding to develop and implement drinking water solutions in Nitrate At Risk Areas.
- AB 2334 (Fong): “Affordability” This bill would require the Department of Water Resources to conduct an analysis of water affordability every 5 years as a part of the California Water Plan Update. The analysis would include identifying factors contributing to high water rates and proposing programs to make water affordable to high cost communities.
- AB 2238 (Perea): Establishing clearer funding mechanisms to develop and implement projects that connect and consolidate small disadvantaged community water systems without safe, affordable drinking water.



# Questions?

